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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,373	10/08/2003	Dewain L. Wasson	8336.13US01	6124
23552	7590	01/21/2005		
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER MULLINS, BURTON S	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/682,373

**Applicant(s)**

WASSON, DEWAIN L.

**Examiner**

Burton S. Mullins

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11 and 18-21 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,12 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 3,5,7,13 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-2, 4, 6, 12, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleckenstein (US 3,482,125) in view of Okenfuss (US 1,991,622). Fleckenstein teaches a motor comprising: a shaft running axially through the motor (Fig.5); a sleeve 22 at least partially surrounding the shaft (Fig.5), the sleeve 22 including a periphery defining an open end (Fig.5); a frontplate 23 covering the open end of the sleeve (Fig.5); and a member (intermediate layers) 2/6/8/11 positioned between the sleeve 22 and the frontplate 23 (embodiments 1-4 in Figs.1-4), the member 2/6/8/11 being formed of a unitary piece of non-conductive material, i.e., hard plastic (c.2, lines 5-10) including a first portion positioned between the sleeve and the frontplate, a second portion extending axially with respect to the sleeve, and a third portion extending radially (see Figs.2-5); wherein the member inherently reduces a leakage current through a bearing of the motor since the member comprises plastic, which prevents any leakage current induced by asymmetric flux distribution in the stator from traveling to the bearings.

Fleckenstein differs only in that the frontplate 23 is not metal, per se.

Okenfuss teaches an end plate for motors comprising a pressed sheet metal (c.1, lines 3-5) to reduce breakage, expense and material expenditure during manufacture while maintaining the necessary strength of the motor (c.1, lines 6-17).

It would have been obvious to one having ordinary skill to provide sheet metal end plates per Okenfuss on Fleckenstein's motor since this would have been desirable to reduce breakage, expense and material expenditure during manufacture while maintaining the necessary strength of the motor.

Regarding claim 2, the hard plastic can be considered "solid".

Regarding claim 4, the hard plastic is located on either side of Fleckenstein's sleeve between respective front- and back-plates.

Regarding claim 6, the "L" shape of the ends of Fleckenstein's sleeve 22 (Fig.5) can be considered to form "a shoulder positioned adjacent to the open end of the sleeve", with the corresponding third portion of the hard plastic adjacent thereto.

Regarding claim 12, the embodiments in Figs.4&5 in Fleckenstein include a hard plastic that is "solid" and "unitary" and comprises a first portion positioned between sleeve and frontplate, a second portion extended to the shoulder of the sleeve, and a third portion contacting the shoulder. Similarly, with regard to claim 14, see Fig.5.

Regarding claim 16, various components such as the stator 21 are provided in the sleeve 22 of Fleckenstein, with a second back-plate 23 coupled to the motor.

3. Claims 1-2, 4, 6, 12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masaru (JP 01-231633) in view of Okenfuss. Masaru teaches a motor comprising: a shaft 2 running axially through the motor (Fig.5); a sleeve or shell 1 at least partially surrounding the shaft, the sleeve including a periphery defining an open end (not numbered, see Fig.5); a frontplate 5 $\ell$  covering the open end of the sleeve (Fig.5); and a member 6 $\ell$  positioned between the sleeve and the frontplate (Fig.2), the member 6 $\ell$  being

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formed of a unitary piece of nonconductive material, i.e., insulation (see abstract), including a first portion positioned between the sleeve and the frontplate, a second portion extending axially with respect to the sleeve, and a third portion extending radially (see Figs.2&3); wherein the member 6 $\ell$  reduces a leakage current through a bearing of the motor (inherent, since insulation member prevents leakage currents induced by asymmetric flux distribution in the stator from traveling to the bearings).

Masaru, as best understood, does not teach frontplate of metal, per se.

Okenfuss teaches an end plate for motors comprising a pressed sheet metal (c.1, lines 3-5) to reduce breakage, expense and material expenditure during manufacture while maintaining the necessary strength of the motor (c.1, lines 6-17).

It would have been obvious to one having ordinary skill to provide sheet metal end plates per Okenfuss on Masaru's motor since this would have been desirable to reduce breakage, expense and material expenditure during manufacture while maintaining the necessary strength of the motor.

Regarding claim 4, note second insulation member 6r between sleeve and backplate 5r (Figs.2&3). Regarding claim 6, the sleeve 1 includes a shoulder (not numbered, see Fig.2) with the radially extending portion of the member 6 $\ell$  bearing against the shoulder. Regarding claims 12, 14 and 15, the member includes first, second and third portions which extend radially, axially and radially, respectively. Regarding claim 16, the steps of the claimed method are inherent in the assembly of Masaru's machine.

***Allowable Subject Matter***

4. Claims 8-11 and 18-21 are allowed. The prior art does not teach, inter alia, that the metal frontplate defines at least two holes through which fasteners extend from the frontplate, through the sleeve, and through a backplate (claim 8); or that the member positioned between the sleeve and the backplate also defines a tab positioned within the notch of the sleeve to rotationally orient the backplate with respect to the sleeve (claim 18).

5. Claims 3, 5, 7, 13 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Neither Fleckenstein nor Okenfuss teach or suggest an inner periphery of the third portion defining at least two notches, each notch accepting a portion of one fastener as each fastener extends through the motor (claim 3); or a second member defining a tab that is positioned within a notch defined by the sleeve to rotationally orient the backplate with respect to the sleeve (claim 5); or a backplate coupled to an opposite end of the sleeve, wherein the backplate is made of non-conductive material (claim 7); or that the inner periphery of the third (radially-extending) portion of the member defines at least two notches (claim 13); or a method including the step of running a fastener used to couple the frontplate to the motor through a notch defined in an inner periphery of a third portion of the member, the third portion being seated in a shoulder of the sleeve (claim 17).

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-2, 4, 6, 12 and 14-16 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that

Masaru fails to teach first, second and third portions; however, applicant gives no reasons for his conclusion. As seen in Masaru's Figs.1-3 and 5, there is both a radial and axial dimension to the insulating member 61 located between the sleeve 1 and frontplate 51.

### *Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins  
Primary Examiner  
Art Unit 2834

bsm  
17 January 2005